

Figure 1

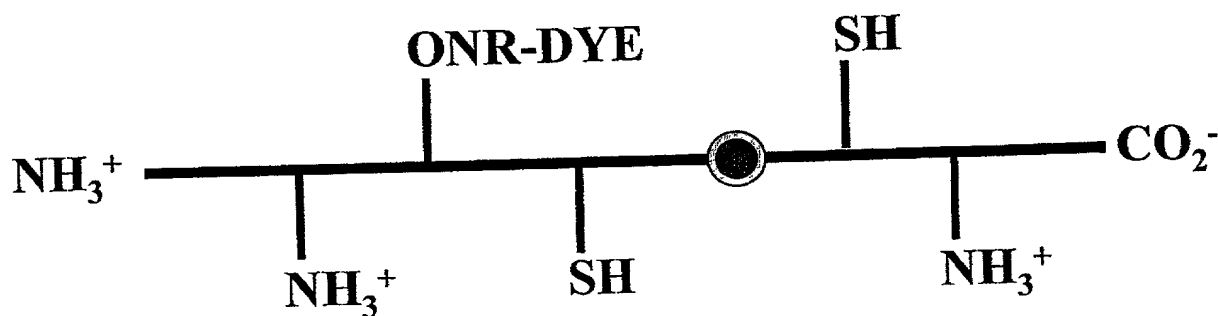
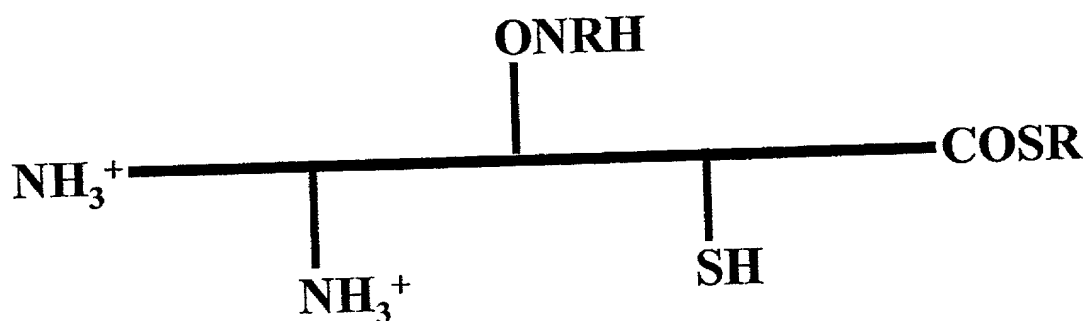
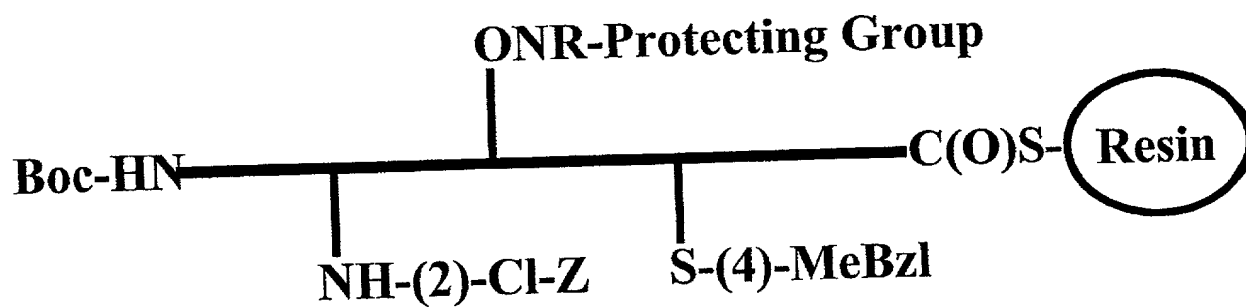
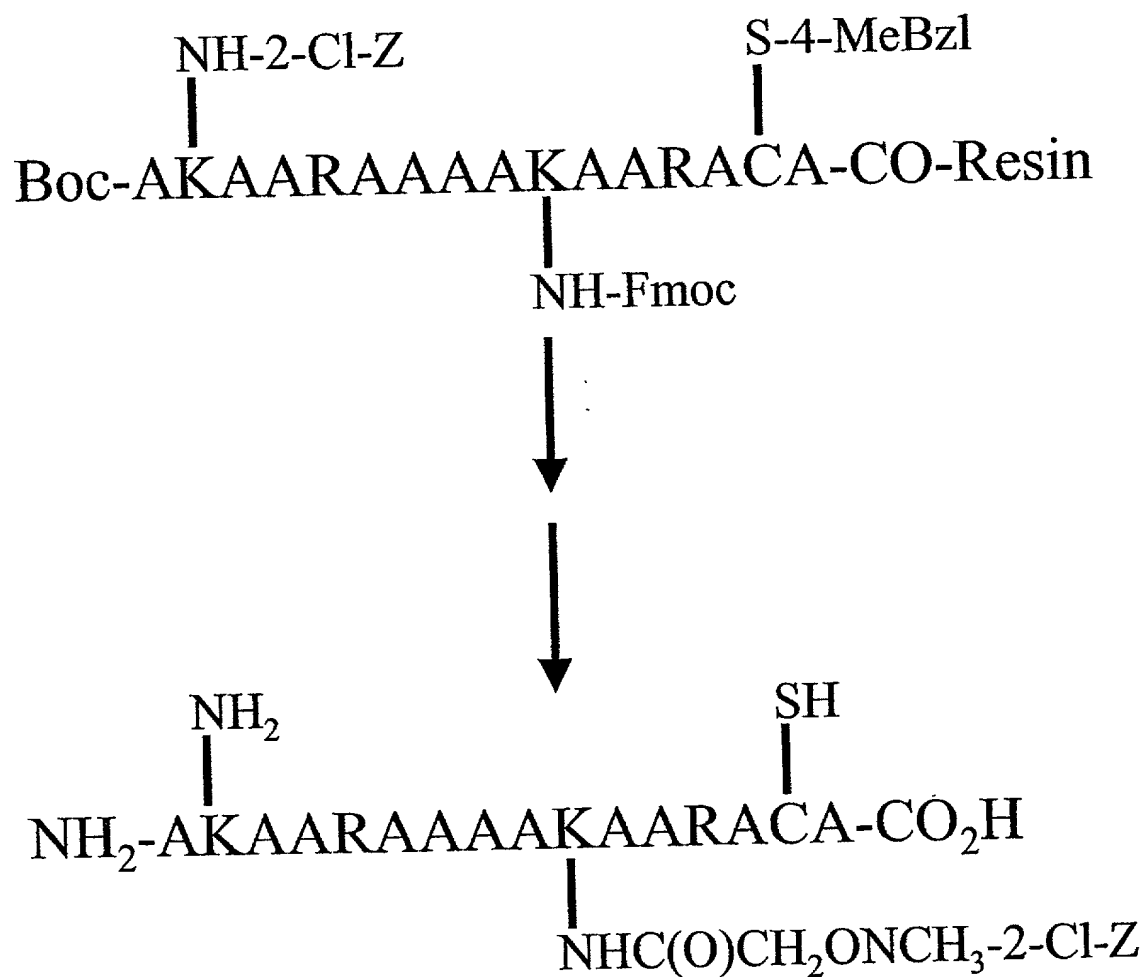


Figure 2



SA-Test Peptide

Figure 3

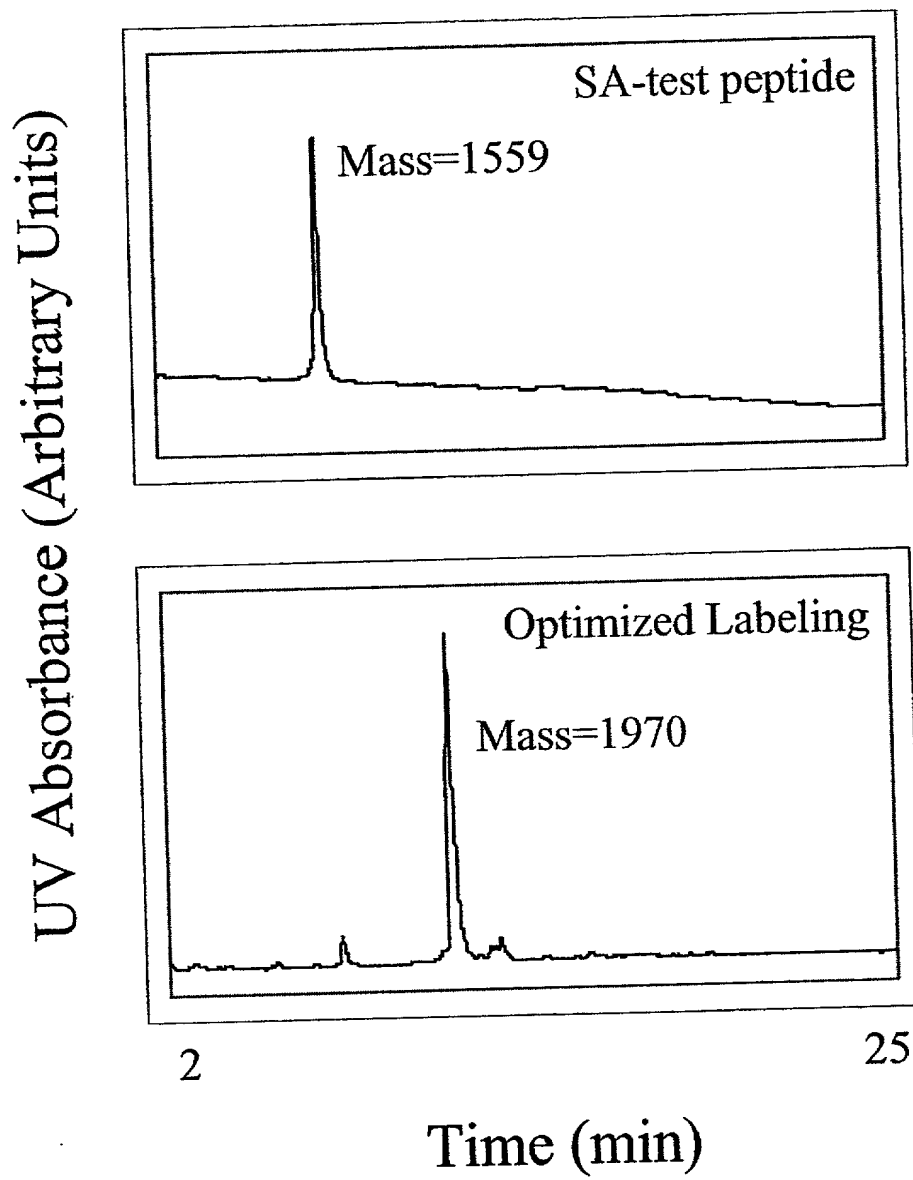


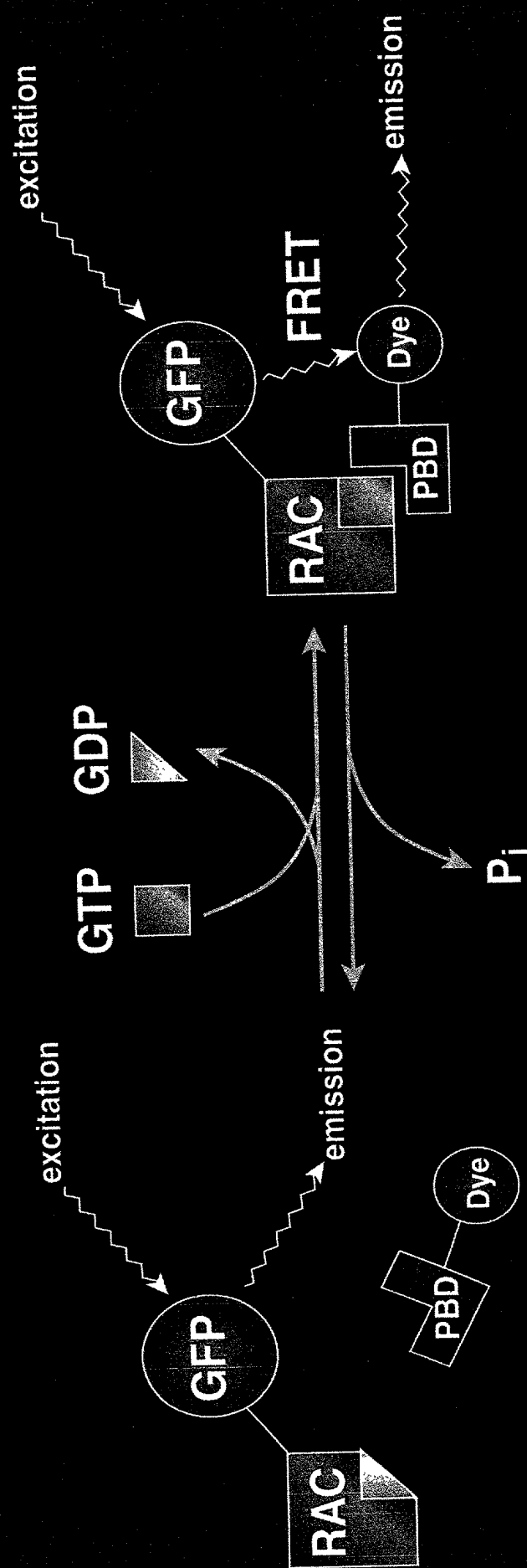
Figure 1 consists of 12 sub-graphs labeled (a) through (l), each showing a time course of a different physiological parameter over a 10-minute period. The x-axis for all graphs is 'Time (min)' ranging from 0 to 10. The y-axis scales are as follows:

- (a) HR (b/min): 0 to 180
- (b) SV (L/min): 0 to 120
- (c) CO (L/min): 0 to 120
- (d) MAP (mmHg): 0 to 120
- (e) PVR (mmHg): 0 to 120
- (f) SVR (mmHg): 0 to 120
- (g) PPA (mmHg): 0 to 120
- (h) PVP (mmHg): 0 to 120
- (i) PVP/PPA: 0 to 120
- (j) PVP/PPA: 0 to 120
- (k) PVP/PPA: 0 to 120
- (l) PVP/PPA: 0 to 120

Each graph shows a baseline value and a response to a stimulus (indicated by an arrow) over time. The parameters are: (a) HR (b/min), (b) SV (L/min), (c) CO (L/min), (d) MAP (mmHg), (e) PVR (mmHg), (f) SVR (mmHg), (g) PPA (mmHg), (h) PVP (mmHg), (i) PVP/PPA, (j) PVP/PPA, (k) PVP/PPA, and (l) PVP/PPA.



Figure 5



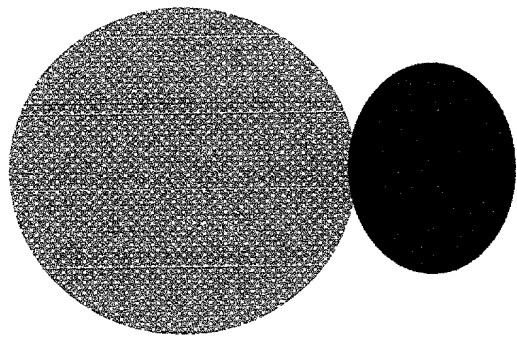


Fig. 6a

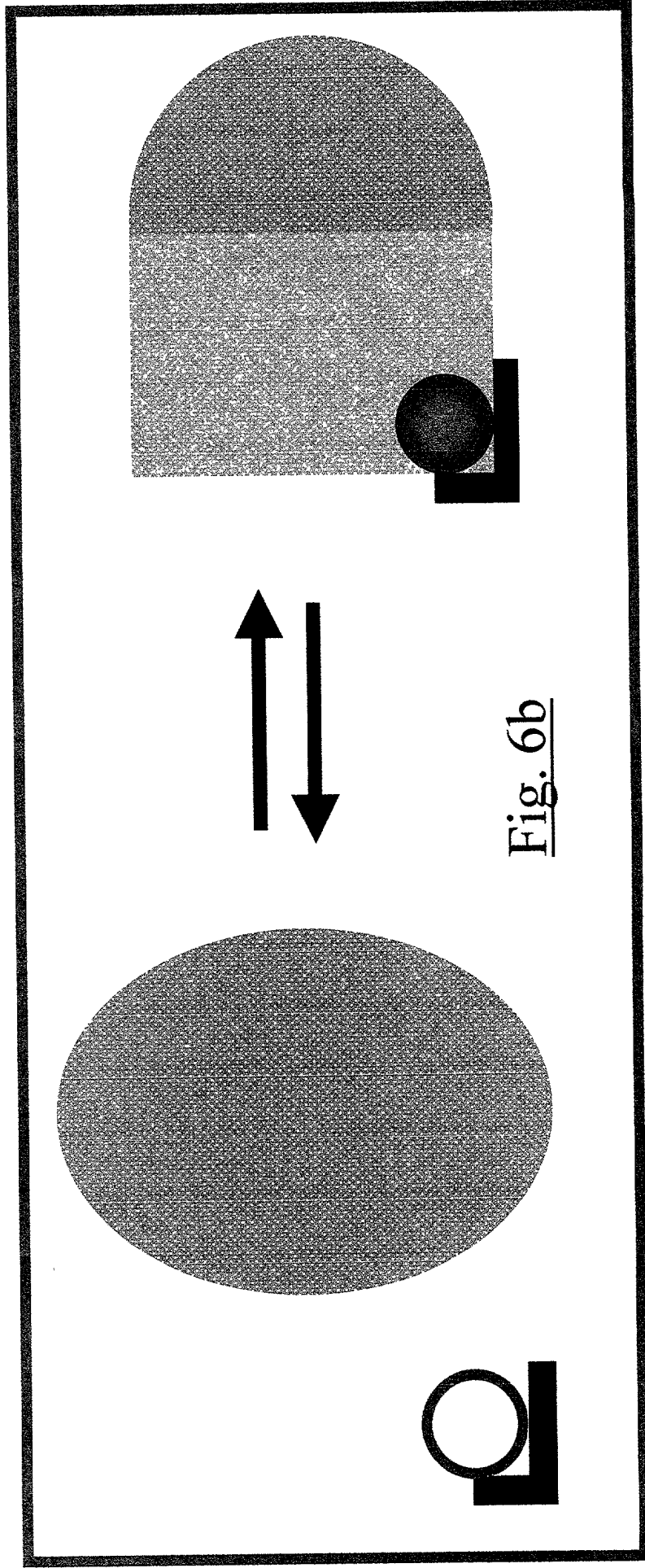
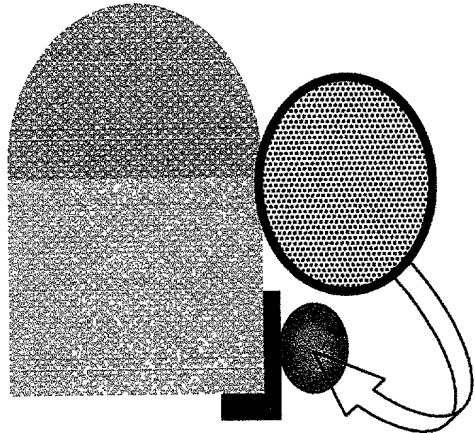


Fig. 6b

Figure 7A: GFP-Rac to Alexa-PBD FRET

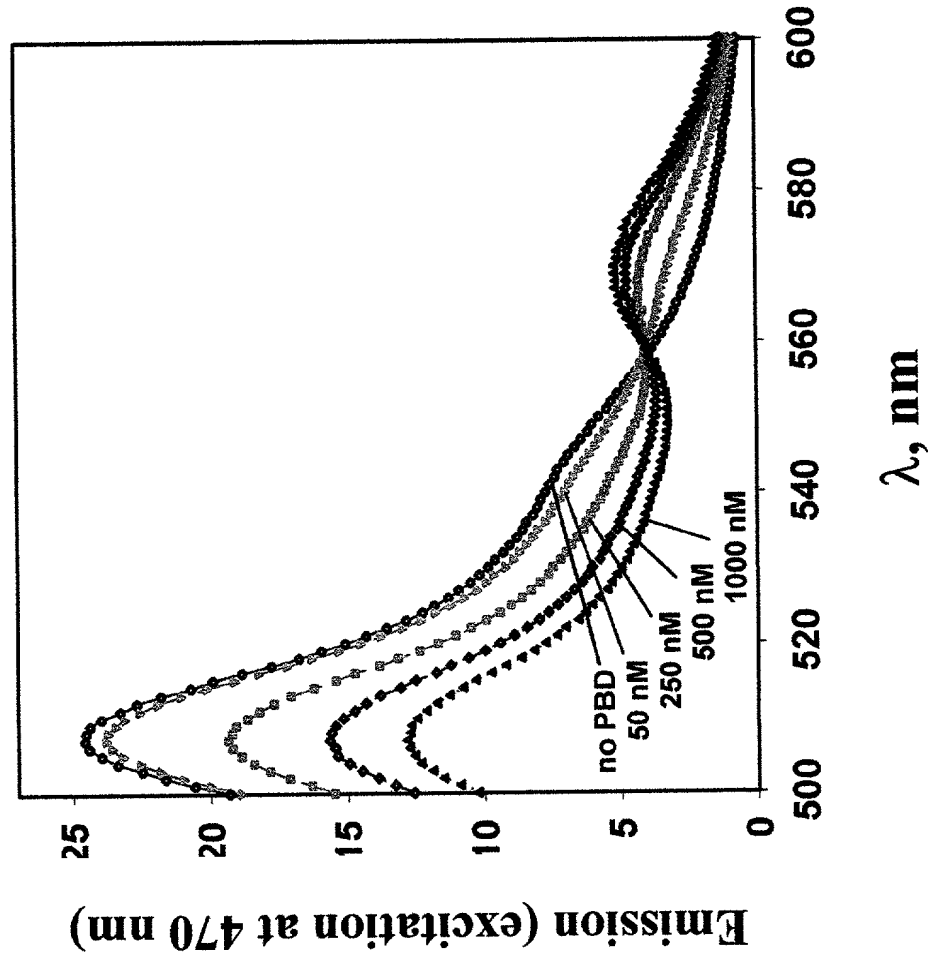


Figure 7B: FRET response to nucleotide state of Rac-GFP

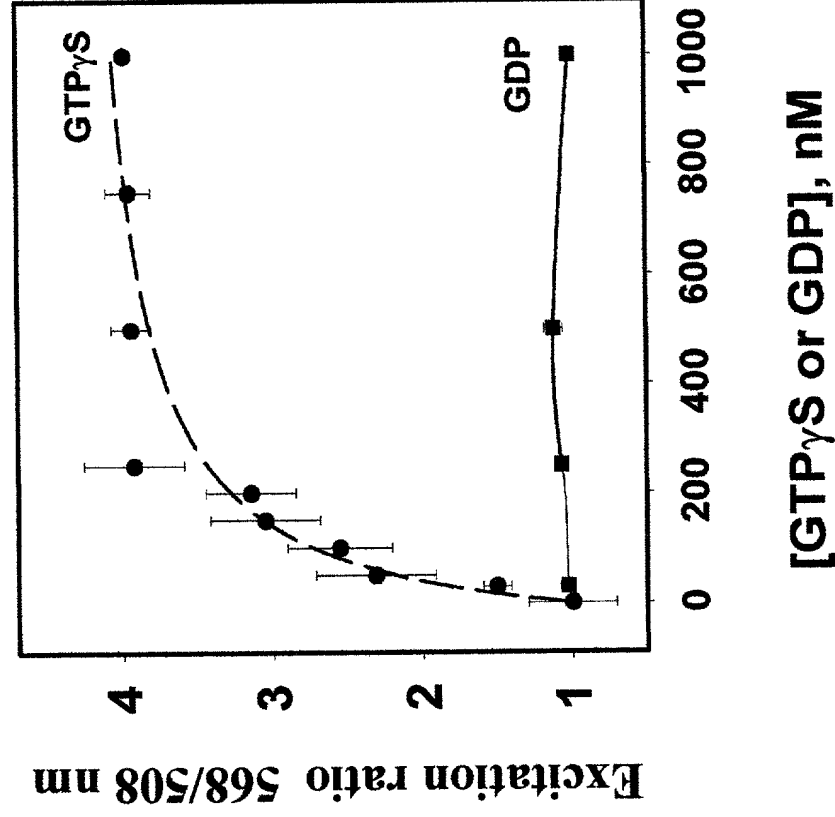
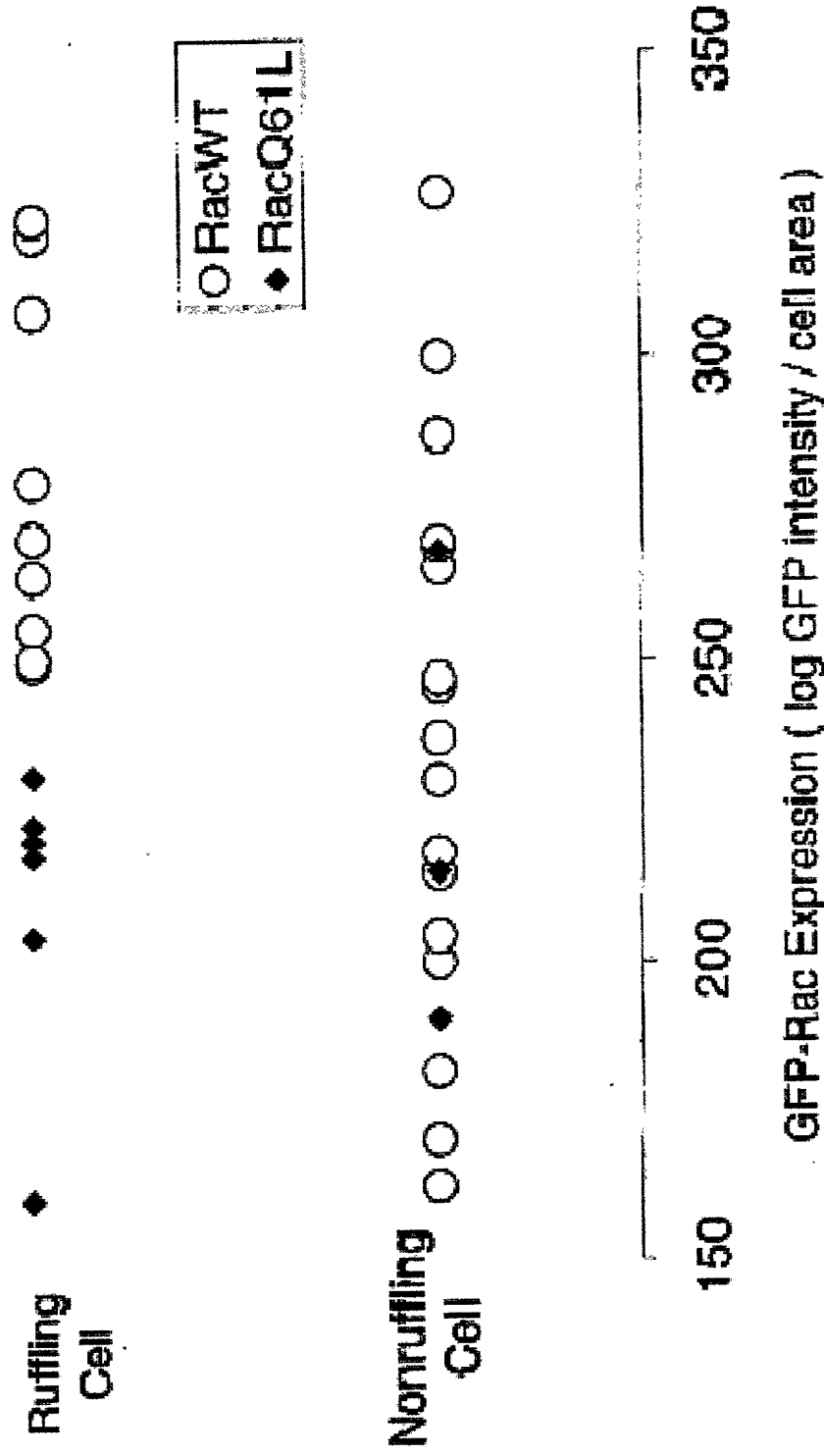


Fig. 8A

Individual cells scored for Rac-Induced ruffling



Individual cells scored for PBD inhibition of ruffle induction

Ruffling
Cell



Nonruffling
Cell

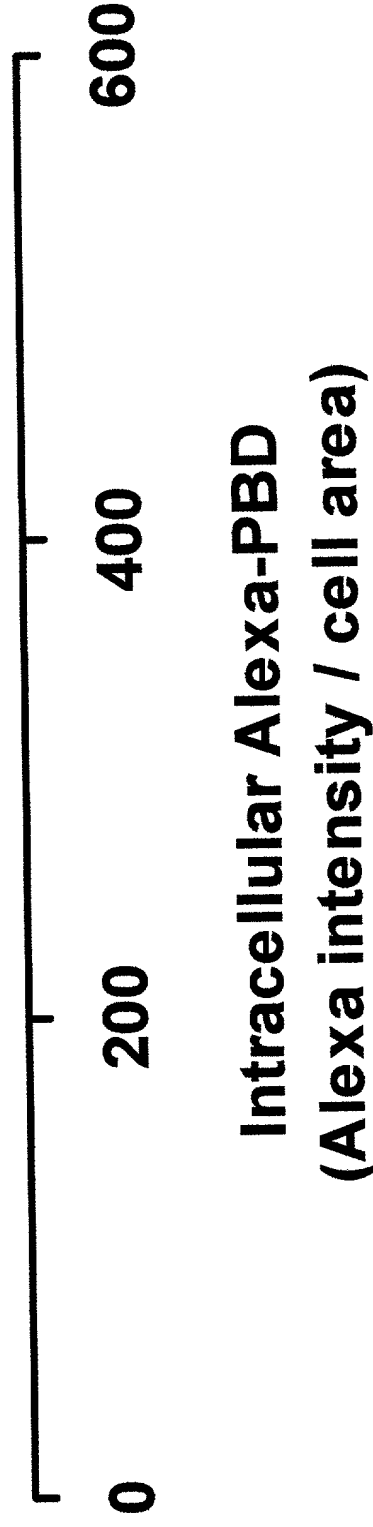


Figure 8B

Fig. 9 A and 9B: Serum stimulation of a Swiss 3T3 fibroblast

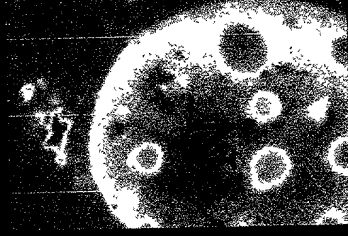
GFP-Rac

FRET

A.

Before

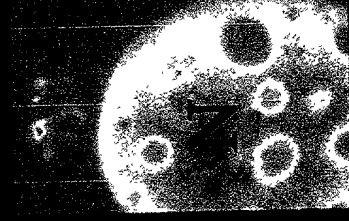
N



B.

After

N



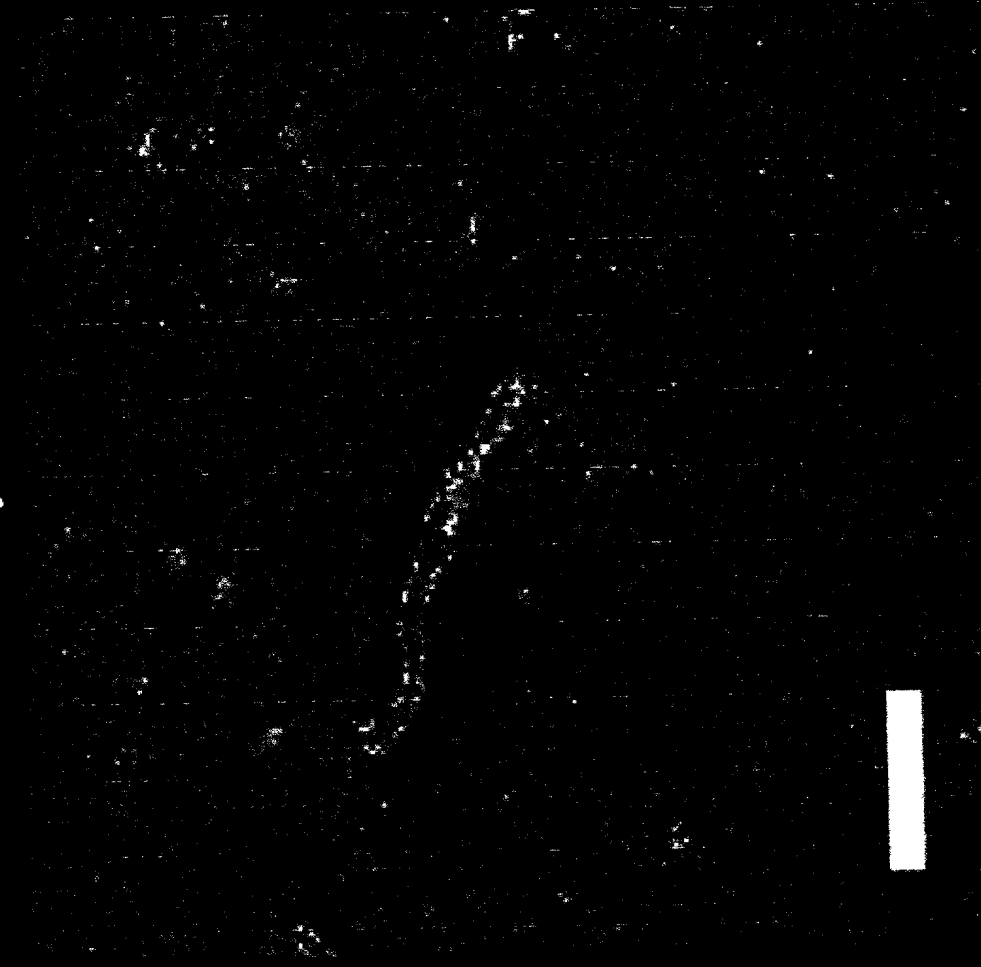
Ruffle

Ruffle

Fig. 9C and 9D: The same ruffle visualized using
either FRET or Alexa-PBD localization:

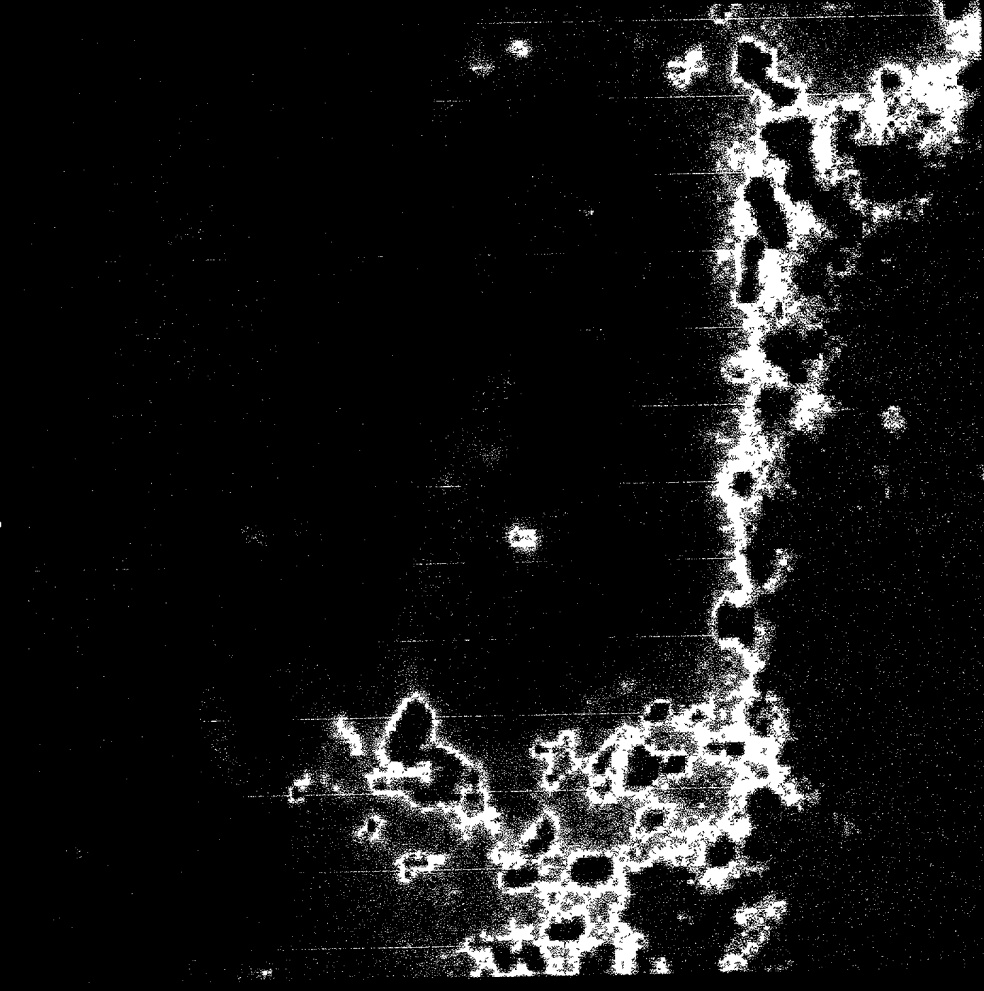
C. FRET

intensity = 0-84



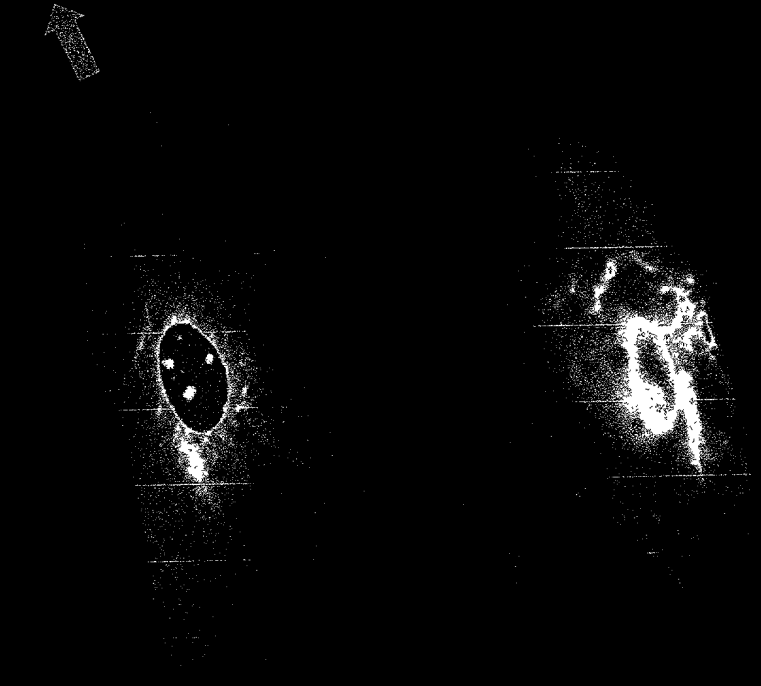
D. Alexa-PBD

intensity = 88-345



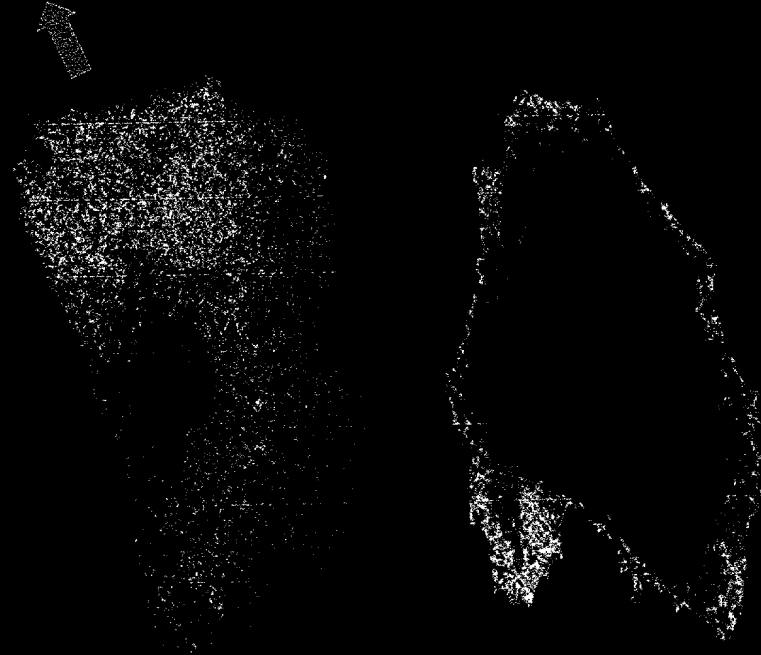
Wound healing

Fig. 10A: Rac-GFP



Confluent monolayer

Fig. 10B: FRET



Magnitude of gradient when highest at front

128 +/- 51 %

n=12

Magnitude of gradient highest at rear

9 +/- 4 %

n=4

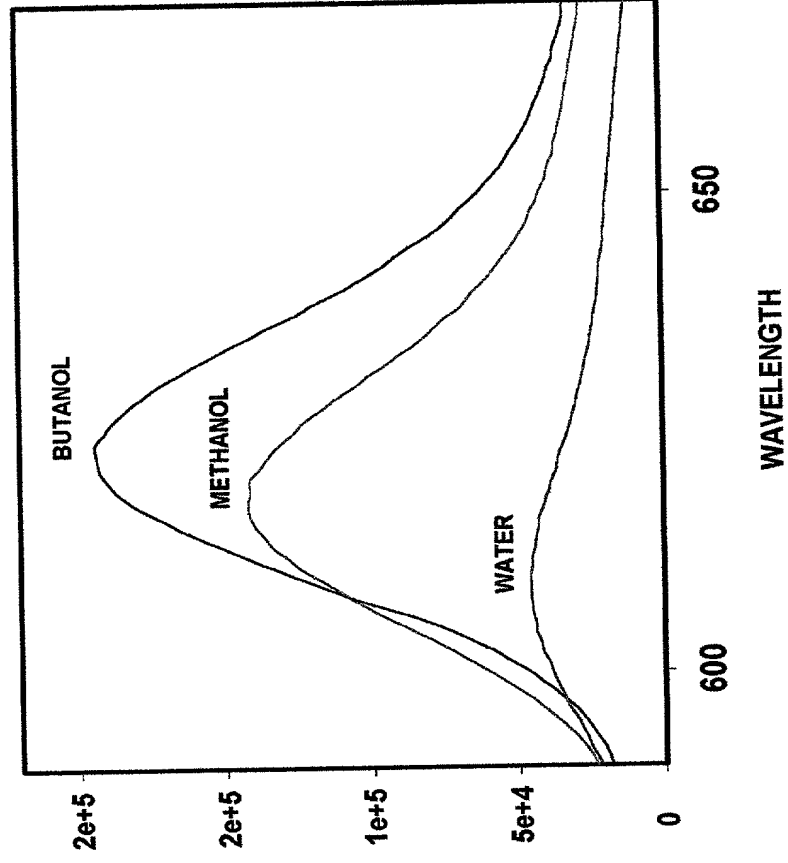
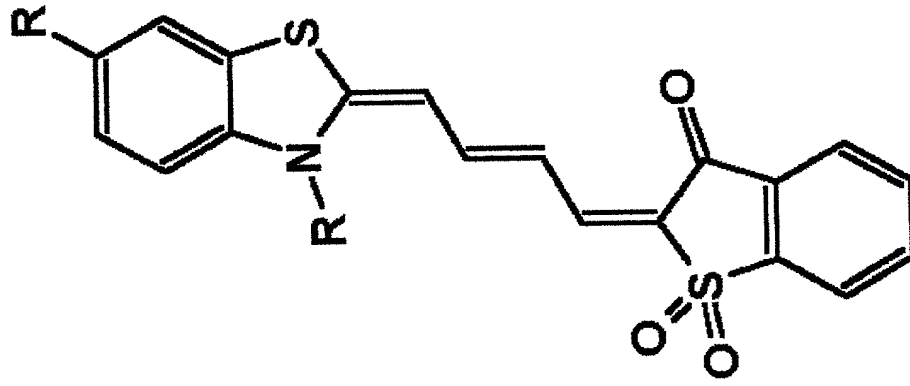


Figure 11



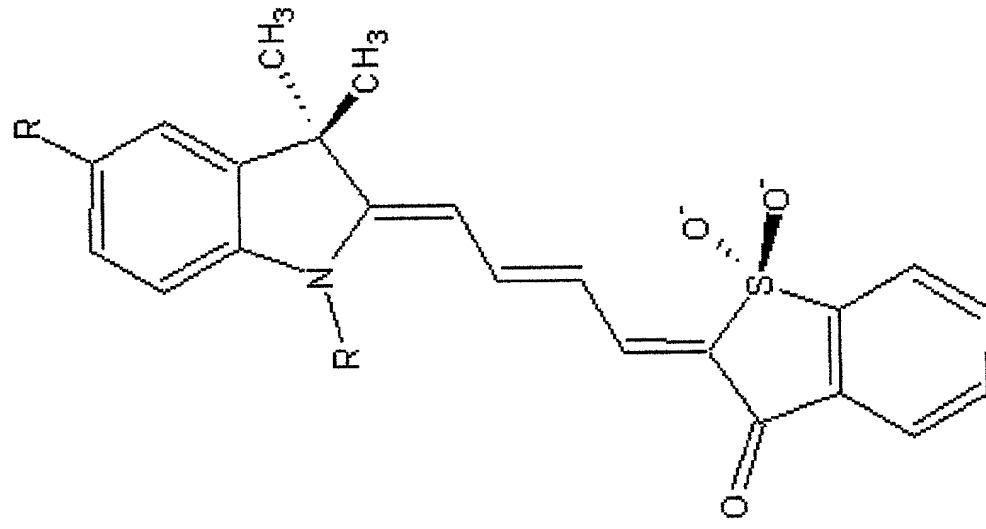


Figure 12

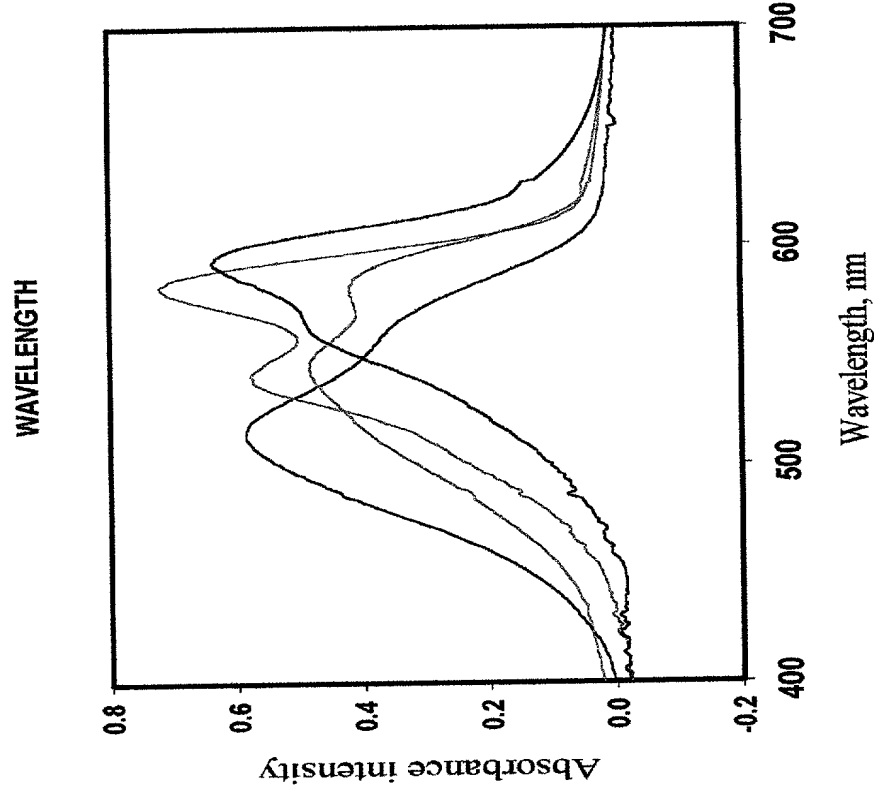



Figure 14:

“CBD” (WASP CRIB domain)

 essential residues

 sites of dye attachment

 hydrophobic amino acids

Cdc42

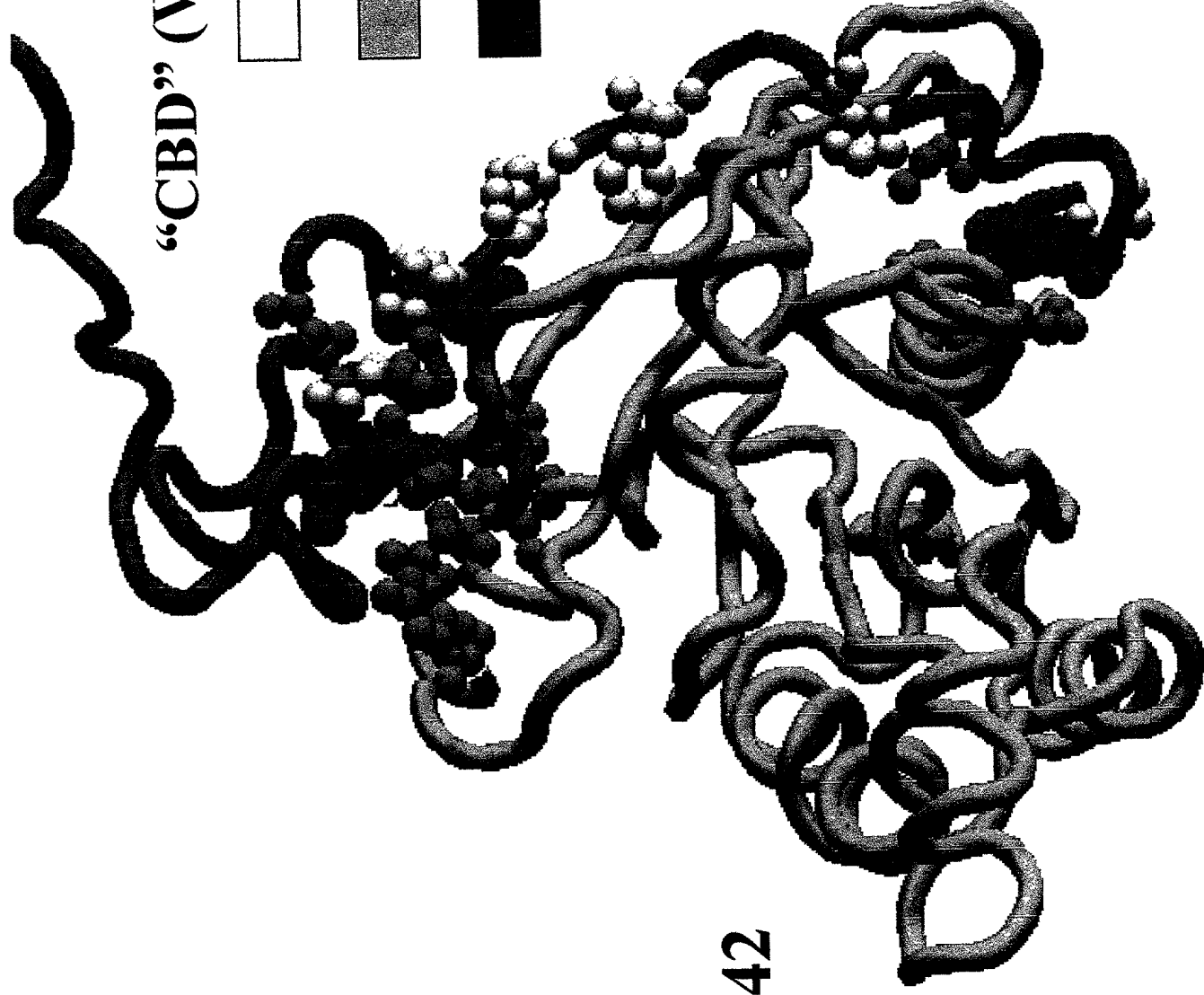


Fig. 15: Fluorescence of Mero-CBD responds to Cdc42 binding

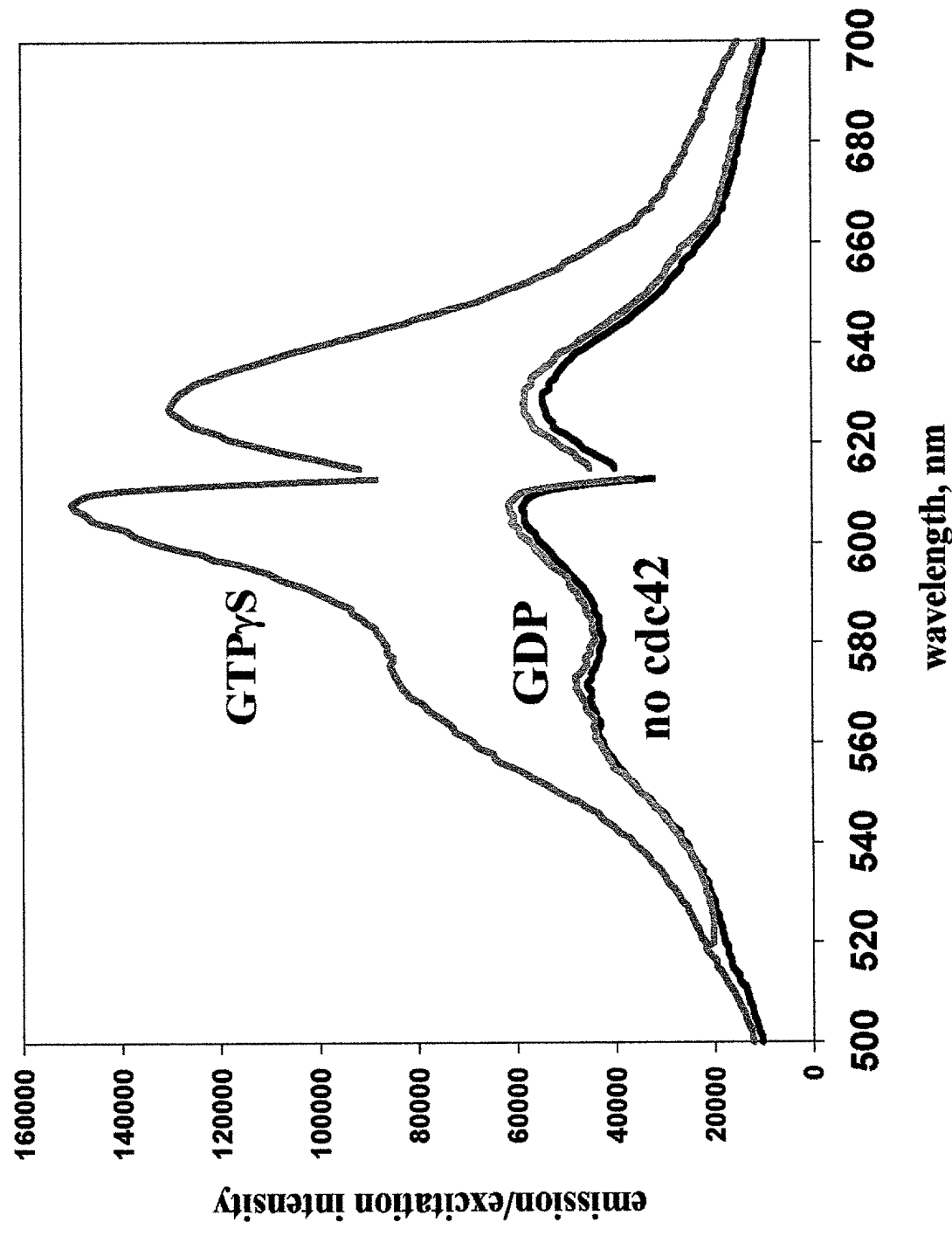
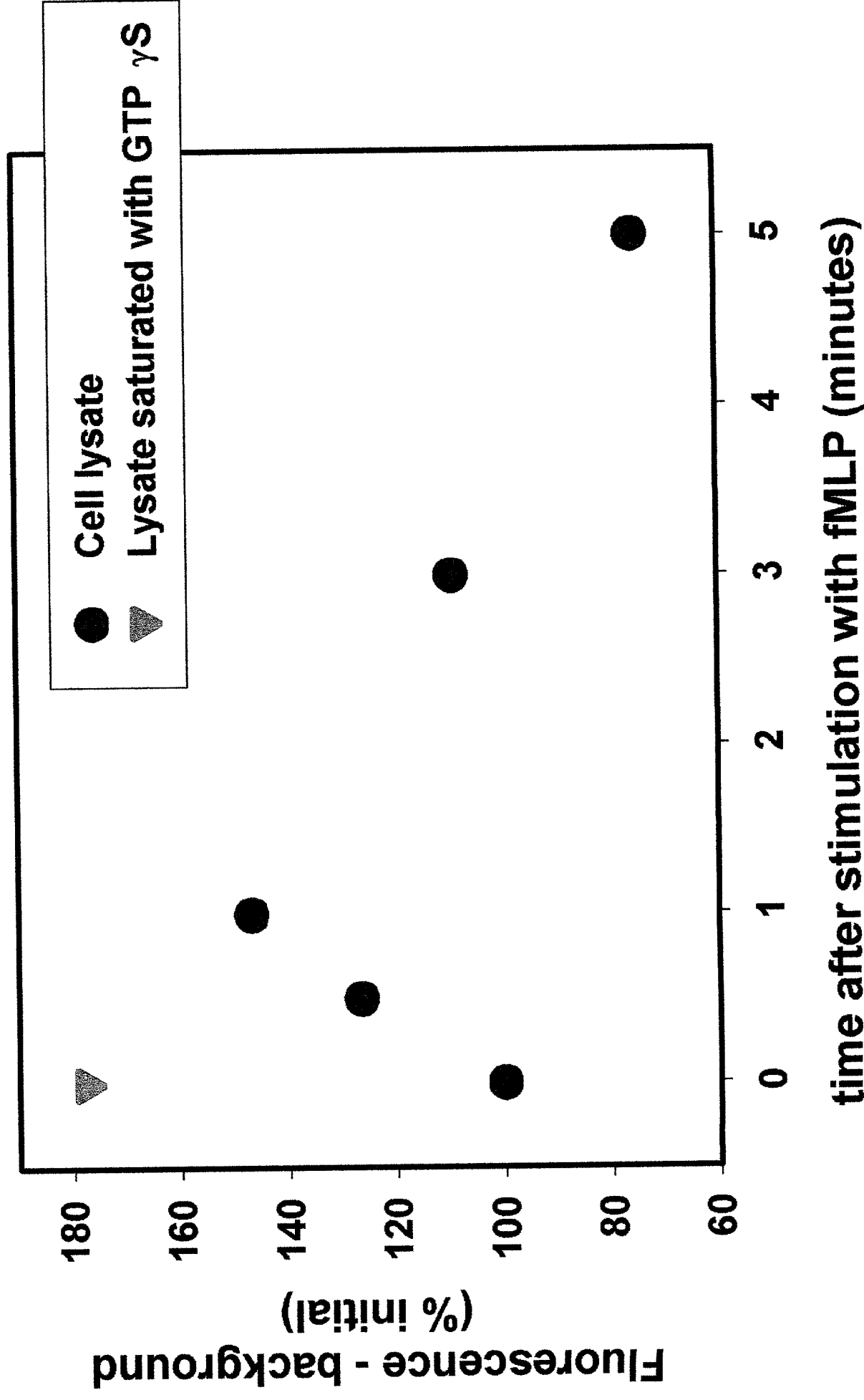


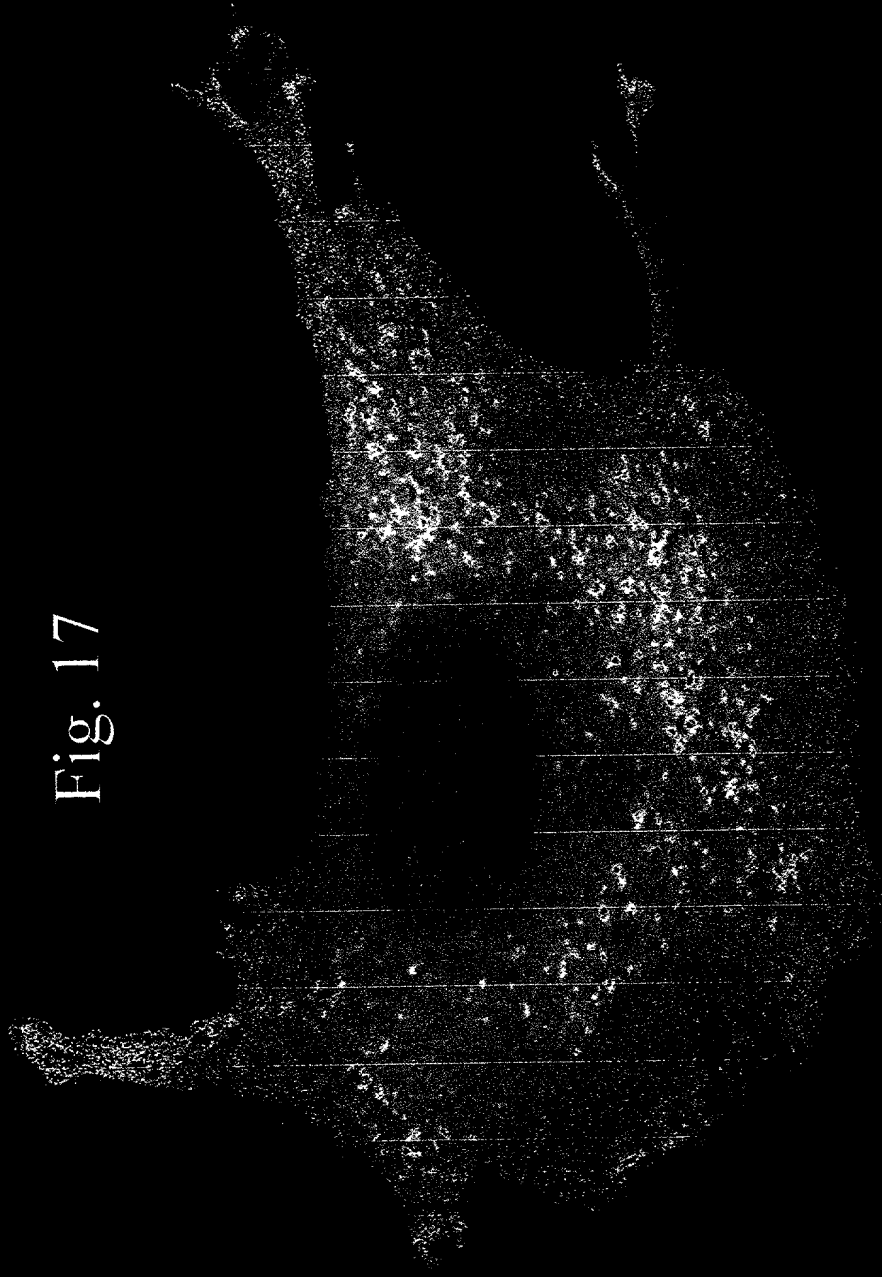
Fig. 16: Mero-CBD in neutrophil lysates



Mero-CBD
Alexa-CBD

Fig. 17

Intensity =
28 - 72



Alexa-CBD

Mero-CBD

